



No 16

Inaugural Dissertation
ON

CHOLERA INFANTUM.

Submitted to the Examination of the
The Rev. Frederick M. Brasley D. D. President
The Trustees & Medical Faculty of the
University of Pennsylvania.

For the Degree of Doctor of Medicine

On the 27th day of October 1822.

By James M. Greene of Pennsylvania
Member of the Philadelphia Medical Society.
Passed March 27th 1823

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Memorandum of the Committee of the

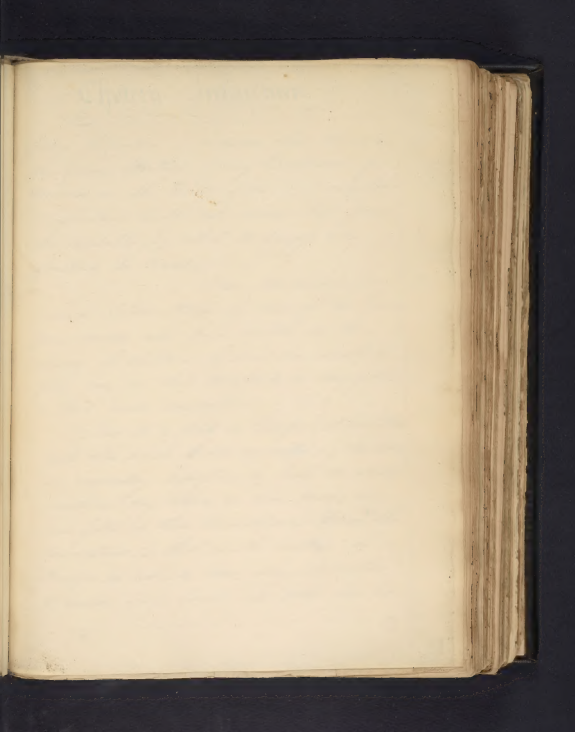
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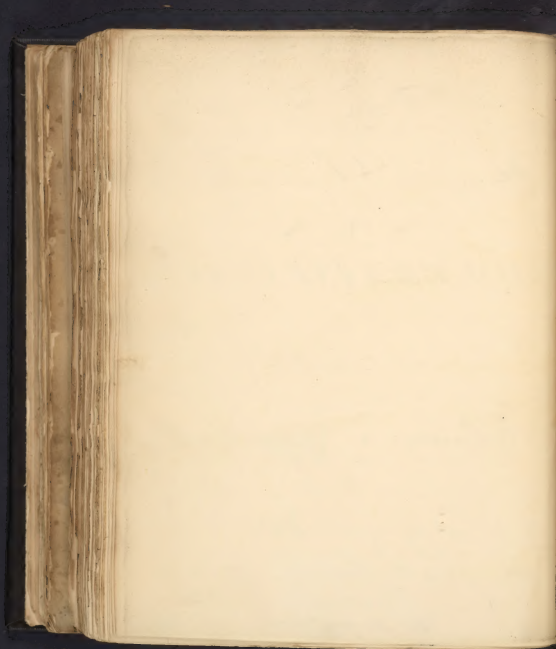
MEMORANDUM

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Cholera Infantum.

Cholera Infantum is a disease that demands the serious attention of every Practitioner of Medicine in the United States, not only from its prevalence in the hot seasons, but from the mortality by which its progress may sometimes be traced.

From the cursory view which I have taken of some of the European writers who have written on the diseases of children, I have been unable to find any one that corresponds in every feature to that under consideration.

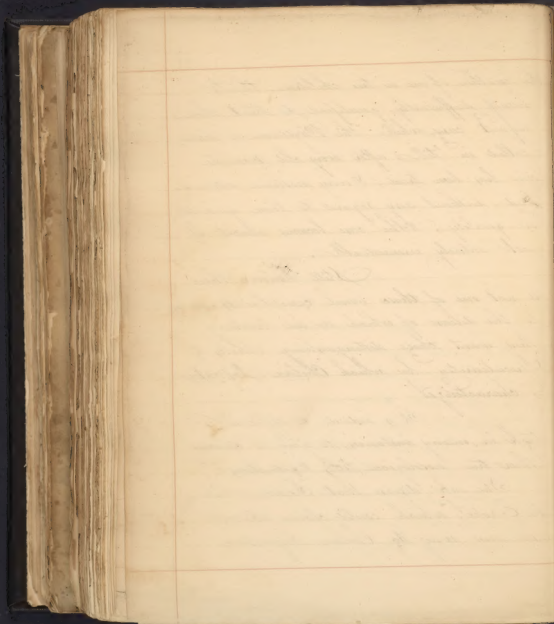
True it is that in Europe (at least the part with which I was acquainted) children are frequently distressed by bowel complaints, sometimes very tedious in their course; may even fatal in their termination. From the circumstance that in the countries of Europe as well as here, any old mother & indeed very young one who has been

the mother of one or two children, thinks
herself sufficiently qualified to treat these
infant cases, while the Physician is never
called in till after every old woman's
cure has been tried, & every nostrum adminis-
tered, without any regard to time, quantity
or quality; & the case becoming almost if
not entirely irremediable.

Still however there
is not one of those visceral expulsi^ons similar
to the disease of which we are treating.
They want those distinguishing marks &
peculiarities by which Cholera Infantum
is characterized.

It is indeed a difficult
task in many instances, to give to disease
their true nosological title & situation.

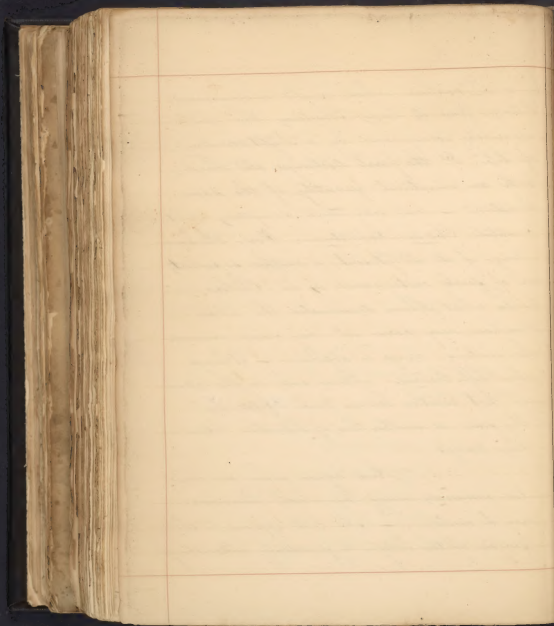
The only disease that I saw while
in Europe, which could claim alliance
in any way to Cholera Infantum



is a Diarrhoea which might be denominated
bilious. From its being sometimes, tho' not
invariably accompanied by a slight vomiting
of bile, & the fecal discharges, also mixed
with an unnatural quantity of the same
secretion - but even these symptoms do not
constitute Cholera Infantum. For, the vom-
iting if at all present, is neither so violent,
nor of such continuance as in Cholera;
besides, what I have denominated the bilious
Diarrhoea, may occur at any season whenever
the exciting cause is applied - Whereas
the Chol. Infant. appears only in the extreme
hot weather between June & September.
This, I say, is another line of distinction between
these diseases.

And again when we consider
the numerous ways by which Diarrhoea
may be caused, - As cold applied to the
surface of the body, a suddenly alternating

with



with heat - I am in the most possible
of a nervous state - I am in the
of the highest degree of doubt.

Further viewing of almost & since I say
that it is the frequentest symptom
& I am sure be called. Every condition
which produces one is a capitalist. I am
not, however, I must with some accuracy
be designated. "Frequent" "Frequent".

This shows a sure source of division. It
shows in a similar way as to itself -
more after the degree of "Frequent" and
concerned in the highest degree that
the "Frequent" of the "Frequent" "Frequent"
it will be followed by a "Frequent" -
and generally the "Frequent" is a sure
& "Frequent" "Frequent" "Frequent" "Frequent"
it will be followed by a "Frequent" "Frequent".

But the cause is that not one of the
many causes of "Frequent" which will be
()



continued. "Every man must mind
(I mean) to be educated, and prove
the old & new sense of justice, and
however they may tend, as they most evidently
do, to improve the nation.

But does dentition or mowing
which have been accused of the most
Prominent exulting, ever cause the disease?
I would say, not - The dentition is
generally happy in Winter or Spring
as in Summer or Fall & Cholera & Malaria
does not follow at these seasons: the
infection seems to be as great & mowing is
not the cause, for some have been some
in cases that have terminated in Cholera
but other symptoms of derangement have
been found in the bowels. The Malaria
& Cholera have been found very prominent
& highly susceptible. & the migration of the
infecting have been frequently observed.



It is a settled point in the medical world -
that cold is not the best and most proper
treatment in Pneumonia, especially, when it is
continued to 10, according to the use of
the skin of these parts is more susceptible
to a more violent state of Predisposition.

The the same substance does the reverse
that which is the most part common
sudden in the latter Part of the
inflammation of the lung, and therefore in
the lungs, more or more, descending and
into the pleura and Bronch, but the
pleura separately is generally brought on
in a more violent state, the disease of the
pleura is produced.

Now the more violent
inflammation. The heat is more more
violent than it does towards, when
in Pneumonia ranges more deg. higher.
One reason is obvious - The degrees

considered.



considerable time for the body, to accommo-
date it to any sudden change.

The subject, as thus treated by sudden trans-
actions, how much more must, it is to be
supposed, greater availability & tenderness of the
alimentary canal are to be easily absorbed into
action.

(I will mention, I have
a number serves me mentioning it, as being
a disease almost if not entirely peculiar
to the United States, the same idea
I have endeavored to support, which may
be pursued in the foregoing remarks).

And I think it is a distinct
disease, wholly unconnected with & different
from other local conditions of the
system, as in other countries.

In the description of it in the late
No. 1. it can be added.

He



in summer by sailing. But the weather
makes its appearance in Providence in the
middle of June or beginning of July.
(But it varies in other parts of the N. E.)
It continues till near the middle of October,
its frequency & change are always proportioned
to the state of the weather.

It is good weather
from the first of March until the middle of
May one has seen it, sometimes a year
at a distance which continues for several days
without interruption or interruption, but it
more frequently comes in with a violent wind,
& brings a high fever.

Nothing can be more various
than the consistence of the discharges, from the
beginning & the manner in which they are given.
I see a person, two or three times without
any violent pain, but at other times

when



When the body is much inflated or over-
inflated with air they often become
greatly affected from the pressure being
exerted by a great deal of air being
in the lungs, and the heart, & a great deal of air.

The fibres of the intestines may be made
to contract & to relax, & to be
attracted, sometimes converging in position.

The intestine may be made to
be in a state of contraction, & when the
muscles of the stomach are in a state of
relaxation, a fatty looking substance, the colour
from an impure material has been done to
Museum, Membrane of the intestine is it becomes
abundant. The flesh will be found with
blood about the rim of the stomach when
it is in a state of relaxation.

But the most usual
appearance of the flesh is given by the
relaxation of the



the manner in which some of my patients
are treated, appears to me to be improper.
The liver may be excited to evacuate secretion
without any interposition of the intestines. & the
bile then becomes a source of irritation to the
bowels, or if the bowels be differently affected the
irritation may excite the liver to new copious
secretion. — Another way by which the
bile may be increased so copiously is — Vomiting.
This may so far act on the Gall-bladder as to
excite it to pour its contents into the intestines
& sometimes into the stomach, but the interposi-
tion of the *Coecum* — & even the irritation
of the bowels is very great the matter discharges
is very green, & in the heaviest state of excitement
it will be brown. The bile issues from
some of the tender vessels on the internal
coat of the intestines, mixed with the bile &
other secretions, which excite for such an ap-
pearance of the evacuation.

It —



It sometimes happens in cases of this kind that
purges or evacuations with will be found operating
on the discharges from the bowels, as if the stool
remains with & water to quench it, & that which
is always intense. The stools will be almost green,
watery, & mixed with bile. Sometimes bloody and
mixed with mucus, but more frequently pale &
fluid of an intolerable & peculiar odour
& easily penetrating the thickest folds of linen.

From the commencement the
disease is attended by a high fever which the
indistinctly mark? is generally allowed to be of
the remittent kind. The pulse is smaller, quick
and very frequent & in various cases the
pulsation runs so rapidly, as nearly
to preclude the power which is maintained.

There is also considerable inequality of tem-
perature, it is not unusual to find one part
excessively warm, while some others & particu-
larly the extremities are being protected from



rate of circulation in pulmonary etc.
Dr. Smith says in some instances children then
the more commoner form of pneumonia is
marked by an C. & S. like their parents. Hence to
see Hesperia

If the disease be permitted
to continue without any remedy, a fatal issue
has been proved the few cases in which, in some
cases, less of symptoms follow, or some cases
the patient becomes healthy to a great extent,
and recovery takes place. The skin becomes
red & hot. Particularly so in the extremities.

In a few cases I saw a few cases
of pneumonia, to which it is not entirely insensible.
In surrounding cities. The little children sleep
in one room, in the situation of one
cousin for a little, but death is not far
from. Dr. Smith says in some cases
recovery has been full recovery, & that
there are not any cases of pneumonia in some

West



Headmaster
case of man, the passions are the dominating,
a house, cause in such Position, your so
argued the case at "Hypnotic" must be a
disposition with your Position, perhaps the
Court having a minority, or in which breast
the links of human slavery has not ceased
to glow.

The first symptoms of the disease
according to the foregoing description which calls
for relief is the *Louise* vomiting.

The exhibition of an emetic to meet this indi-
cation is thought by many of Physicians, just as
to be hazardous, particularly if the stomach
is excited to convulsive & violent action.

And if there is reason to suppose that the
operation, matter has been accumulated, or if the
attack has been so sudden & violent, as to pro-
duce considerable prostration of strength, with
a weak pulse & cold extremities. The



administration of an emetic, would be one of
the injudicious practices. There is indeed the
Great Vomition of Nauvoo which I remain, even
if stimulating applications should be extremati-
zed. The hot water bath is one of the most
powerful remedies for this symptom, especially
when rendered more stimulating by the addition
of Salt & Mustard or Cayenne Pepper. & after
the warm bath I would order a mustard or mu-
stard to the Epigastrium, repeated every
30th hour, till it proves successful.

Even a solution of Camphor in Oleo Sassafras
or of Cantharides mixed with Sassafras
might prove singularly successful. —

At the same time I would order one or
two tea Spoonfuls of Soda O or one drop of
Laudanum; — or what would be
still more efficacious, one or two tea Spoon-
fuls of lime water in a little Mucilage
of Gum-Arabic.



When the offending matter has not been completely
evacuated by spontaneous vomiting, I would not
hesitate to give a mild dose of Spasmodic
in the first instance which should be attended to
in the administration of such Medicine —

but most attention is directed to the base;
the matter which they contain may serve as
constant source of irritation. It comes it in me
sulphur, Calomel, Castor oil or Magnesia.

In mild cases one or two tea spoons of
the following mixture given occasionally, will
answer, but even irritation which a purga-
tive is designed to meet, will be best relieved
by Calomel. — Independent however
of its purgative powers it exercises a direct &
powerful influence over the Reproductive System.

The valuable property of the Medicine should
be known generally does cause it to rank
highest in the estimation of the best pra-
ctitioners — In most eligible form of ad-
min-



administering it, is in combination with Gum
G. Specac. & a cube from 6 to 8 M. to 1 Year
But the 2nd sort give a pill composed of 50 grs
of Calom. 50 grs of Specac. 87 1/2 grs of Opium every
two or three hours, — & the Calomel may
be given in minute doses, 1/2 grain rubbed up with oil
till it is a generally administered every 2nd hour.
till the stools become natural.

Soft. we have provided thus far
in allaying the irritability of the stomach and
giving one or two purges to clear the bowels.
I would next try the cathartic juice of the
Pipsissaloria, a tea spoonful or two at a
time, with one or two drops of Laudanum
according to the age & strength of the patient.
will sometimes succeed in stopping the remaining
Diarrhea — But neither from this nor from
any other medicines are we to look for cures.
success. — At the same time we are giving
the previously mentioned Medicines, we may

give



give injections of Starch, flour, sea. Gum water
or any other demulcent, or we may give some of
the astringent injections, decoction of Gall- Oak
bark &c &c - One thing worth attending on
giving injections is - to administer them in small
quantities - they will thus have the desired effect
whereas if they be given in large quantities
as the generality of Nurses are in the habit of
(unless previously told) they will be ejected
almost as soon as given.

It is natural to suppose the little patient
would require some nutriment. - For, after
the disease has been of some continuance, the
child will be reduced to a state of great
debility & much emaciated, before this stage
or even as soon as the bowels have been eva-
cuated & the irritability of the stomach calm;
we should begin to give some nourishment.
I do not know that any thing will an-
swer better than Gum - Arabic, Malt, &c

Phas-



Pleasant by the addition of some aromatics
as a little cinnamon, cloves, & nutmeg. This
preparation as far as I have seen it, has a
greater effect than we could anticipate from
it reasoning (a priori)

I have heard indeed
that some practitioners treat the disease altogether
on a diet of Gum-Arabic, confining the
patient wholly to it, so much so, as frequent-
ly to render the discharge from Mucilage.
If the child be not yet weaned & still
able to suck, we need not be very anx-
ious to give it much aliment. The Mother's
milk is the most nutritious & at the same
time the most natural support. — But
in case the little patient's mouth become
distended, the Gum Mucilage will become
an article of indispensable utility —
Before I have seen the *Con. cons.* So used that
I should give it the Preference, — It generally

help-



appears in the skin. - Which we are treating
that the excretion has not been well taken
with a common Purgative, how the warm
water should be stimulated; - The Principles on
which it is administered are so plain as not
to require any further explanation.

'Purgatives' may also advantageously be applied
to the extremities.

This summer (1822) I
had an opportunity of testing a part of
the plan of treatment which I have been en-
deavouring to lay down. - Calling about
the middle of July to see a former acquain-
tance - a Respectable Lady - whose present
distressed Situation, is rendered even more
frequent by "The Remembrance of better days".
I had observed her youngest child about
ten Months old, sick & ghostly. Inquire
the cause. - From the manner in which
she described the Grievous state of the

little -



suffer, I knew it was in the last stage of
Cholera Infantum - Dr. P. Morrison being
in attendance, I directed the Mother to
use the Warm Bath, & to give the little
Patient, two or three spoonful occasionally
of a mixture of warm Water & sweet, grated
down on boiled New-Milk, - She was
also directed to administer a few expiratory
of Stearns -

Having procured her
some port wine, she gave it in small quan-
tities mixed with a tea-spoonful or two of
the decoction of Logwood. & homely as
was the remedy employ'd I was the
gratification to find that in 3 days the
child was convalescent.

The warm bath having equalized the
temperature & the internal application together
with the injections stopped the frequency of the
Stools which on my first seeing the child were

Given



green, & water & voids in a state of
effluence. - I next ordered the cold
bath & Gummed Peller round the child's abdomen.
By these simple means, together with the bath
patient being carried out three or four times - I
had the extreme pressure of being it completely
relieved in the space of eight days from the time
of my first seeing it.

I would not however attempt
to say, that the plan which I pursued in this
& one or two other cases would prove universally
successful. - For, as diseases are constantly
varying, from change of season, peculiarities
of constitution & other circumstances, the Rem-
edies applied must in like manner vary to
meet the diff^t Symptoms as they present
themselves.

If the disease be obstinate in
yielding to the Remedies which have been re-
commended. I would not abandon the

Patient,



Plaint as there are numerous others which
may be resorted to.

We have before us the whole
catalogue of Lichens in the Matrica Medica
both from the Mineral & Vegetable Kingdom.
From the Vegetable however there are not more
than three or four which I would use, viz.
the Gall, Logwood, Rhubarb, & a species of
the Blackberry, the latter for every laxative
state of the bowels was a favorite remedy
among the quacks & Nurses of my native country
but was strenuously decried & opposed by the re-
gular bred Physicians, from the very indis-
criminate manner in which it was employed.

and I am disposed to believe that
injurious are for generally employed, to the
exclusion of true remedies which are calcula-
ted to correct the violent motions of the
abdominal viscera. — I have seen patients
in the latter stage speedily recover.



by the use of very small doses of Celandine
frequently repeated. which no doubt would
as an alternative, & even the hypodermic I am
satisfied.

About the stage the decoction
of Hematecyton Campoch. in a little port
wine, or a little spice Rhubarb
might be advantageously given, or some weak
brandy toddy, sometimes proves serviceable.

As nutrient - we may want a
little jelly for the little patient. or it may
now be preparation of some Arrow root.
& Symplice more palatable by the addition
of some spices. The Arrow root Symplice.

What I have known to answer uncommon-
ly well in many cases. is the liquor of
Clams or Oysters, we might infer from the
good effects of it in asthma. that it would
be serviceable here. & on trial it has been
found to justify the conclusion, by imparting

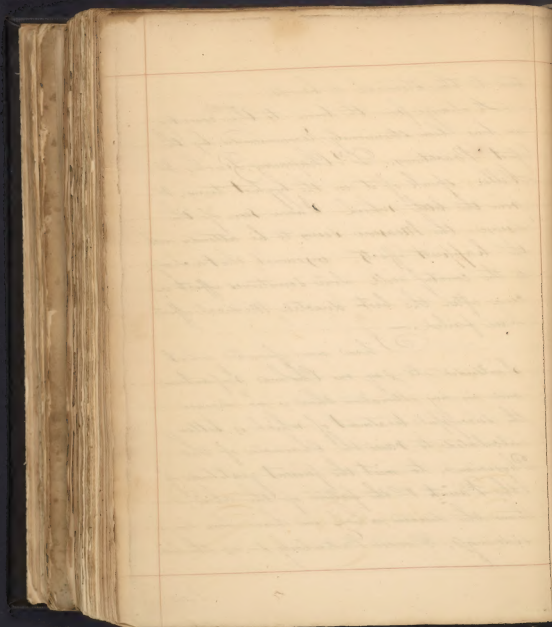


tone to the Stomach & bowels.

A change from the town, to the country air has been strenuously recommended by the first Practitioners. - D^{rs} Chapman, Rush, & Miller, speak of it in the highest terms, & from the little which I have seen of the disease, the Measure seems to be attended with the happiest effects, inasmuch that a change to the country will alone sometimes effect a cure after the best directed Medical efforts have failed. -

I have now finished what I intended to say on Cholera Infantum; and in my estimation there is no disease, the successful treatment of which is better calculated to raise the Character of the Physician, to merit the present gratitude of the Parents & the future of the child, than the disease which we have been considering, & more Particularly so, as the little

Patent



Patients are generally brought to the lowest state
 The Physician perhaps in the winter of life
 when "his head shall be silvered o'er with age"
 amidst the labours of his Profession, shall hear
 this pleasing salutation from his former
 juvenile Patient, now developed into
 Manhood & in the busy scenes of the world.

"This is the Doctor to whom I am
 Particularly indebted for my life, whose
 assiduity & attention snatched me from a
 premature grave" Such an ejaculation
 from an individual of Merit, would
 more than compensate the thousand acts
 of Ingratitude, which Physicians
 are "fated" but too liable to meet
 with in their Progress thro' life.

FINIS.

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